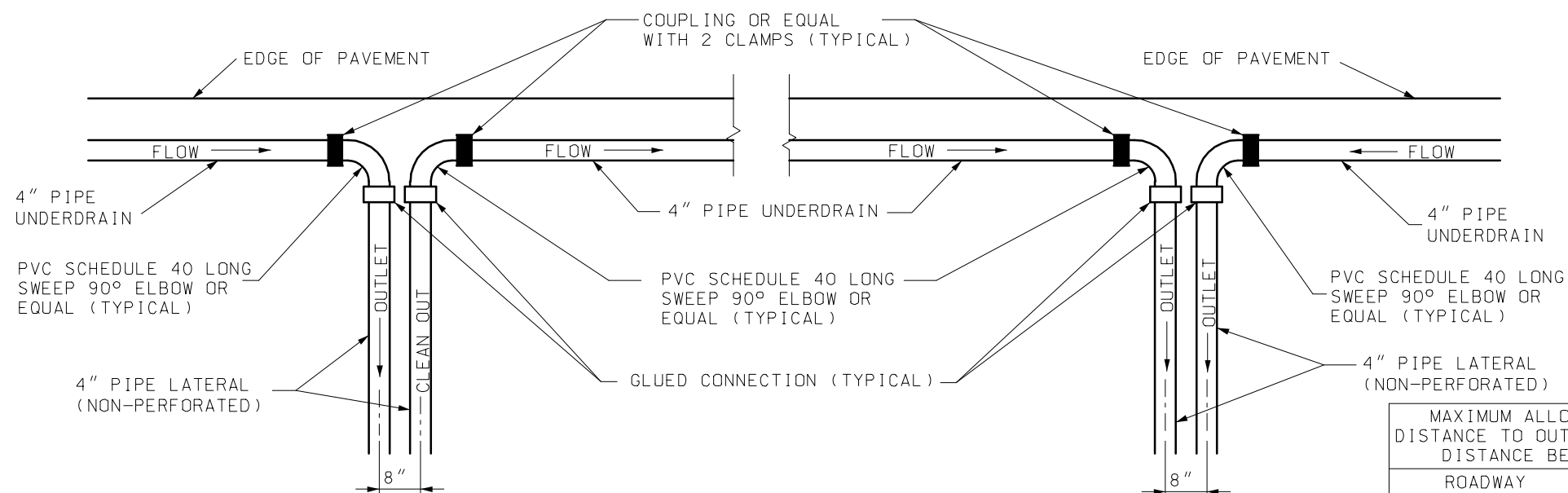


MEDIUM DUTY

HEAVY DUTY



ON GRADIENT

AT SAGS

DETAIL OF PIPE AGGREGATE DRAIN OUTLETS

GENERAL NOTES:

ON SUPERELEVATED CURVES PLACE LONGITUDINAL UNDERDRAIN ON LOW SIDE ONLY.

CONSTRUCT OUTLETS AT LOW POINT OF SAG CURVE.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PAVEMENT UNDERDRAINAGE
PIPE AGGREGATE PAVEMENT
EDGE DRAINS

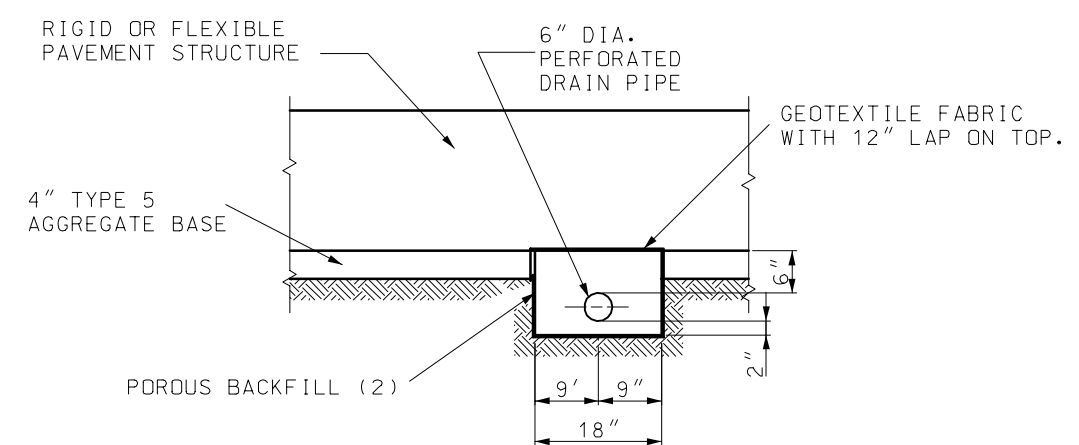
MAXIMUM ALLOWABLE DRAINAGE
DISTANCE TO OUTLET OR SEPARATION
DISTANCE BETWEEN OUTLETS

ROADWAY PROFILE GRADIENT (%)	DISTANCE
≤ 1	250 FT.
> 1 AND ≤ 2	375 FT.
> 2	500 FT.

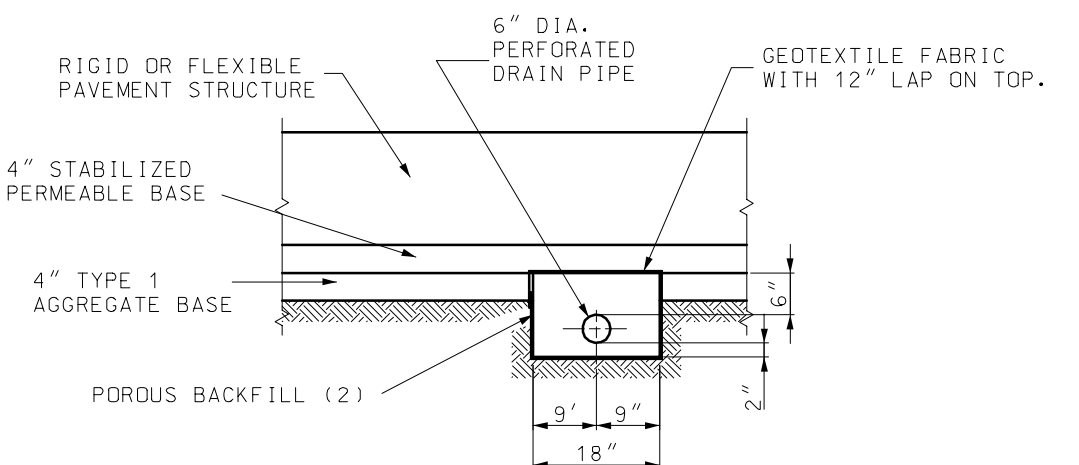
DATE: _____

EFFECTIVE: 07-01-2004

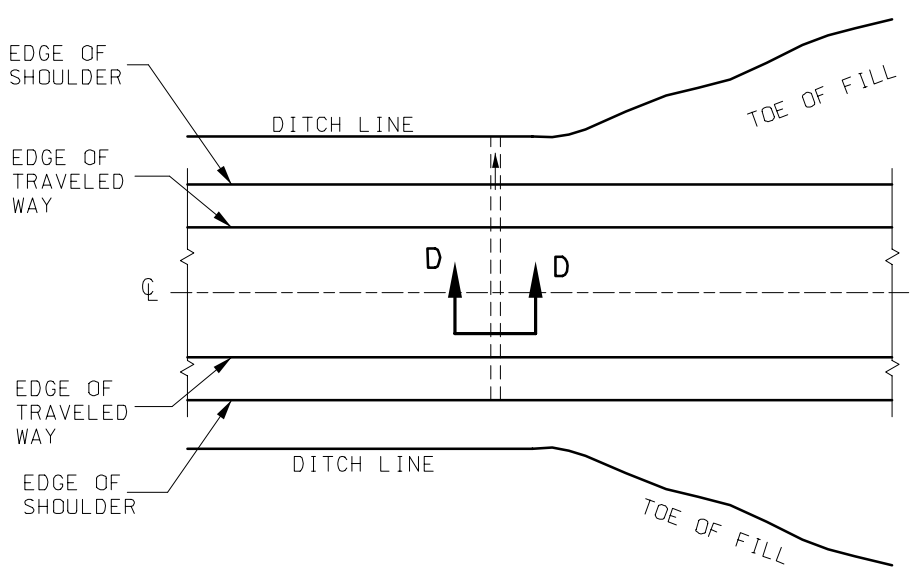
605.10E



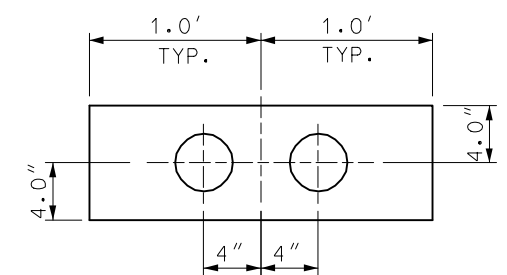
SECTION D-D
WITHOUT PERMEABLE BASE



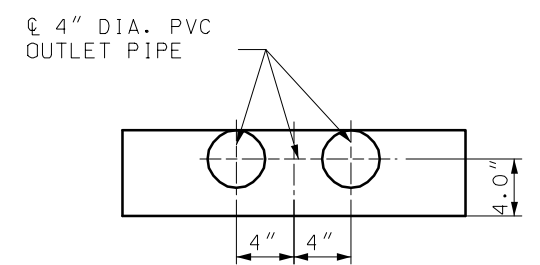
SECTION D-D
WITH PERMEABLE BASE



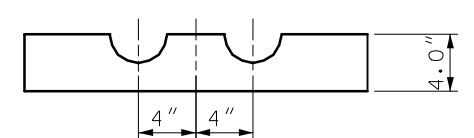
CROSS DRAIN



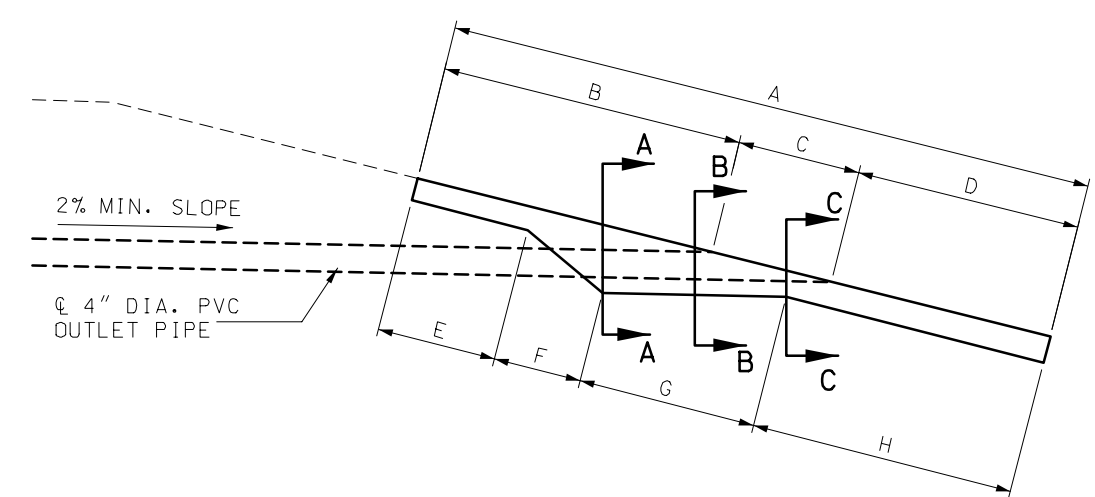
SECTION A-A



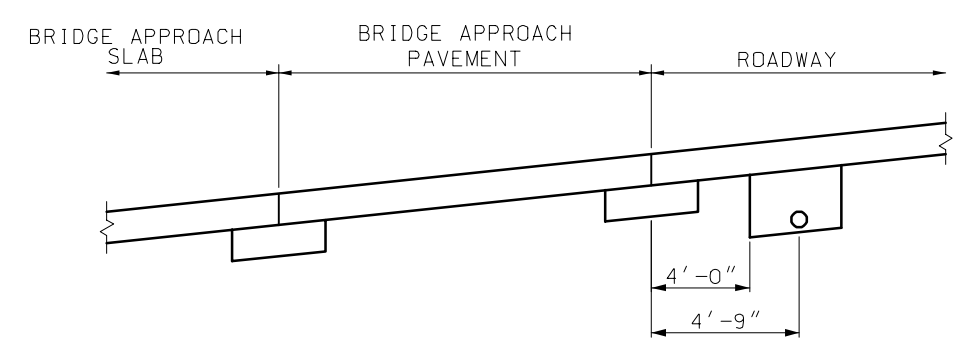
SECTION B-B



SECTION C-C



CONCRETE SPLASH PADS



LOCATION AT
BRIDGE APPROACHES

NOTE: OMIT UNDERDRAIN ON POSITIVE GRADE APPROACHING BRIDGE.

NOTE:

PRECAST CONCRETE SPLASH PADS MAY BE INSTALLED AS APPROVED BY THE ENGINEER.

TOP OF SPLASH PAD SHALL MATCH EXISTING CROSS SLOPE. CONSTRUCT BEND IN SPLASH PAD WHERE CROSS SLOPE CHANGES.

DIMENSIONS ARE APPROXIMATE AND CAN BE ADJUSTED AS DIRECTED BY THE ENGINEER.

ITEM	2:1	3:1	4:1	6:1
A	5.48'	6.19'	6.95'	8.58'
B	2.70'	3.07'	3.46'	4.28'
C	0.78'	1.12'	1.49'	2.30'
D	2.00'	2.00'	2.00'	2.00'
E	2.00'	2.00'	2.00'	2.00'
F	0.46'	0.61'	0.78'	1.18'
G	0.71'	1.07'	1.46'	2.27'
H	2.31'	2.51'	2.71'	3.13'
CONC.	0.15 C.Y.	0.17 C.Y.	0.20 C.Y.	0.25 C.Y.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PAVEMENT UNDERDRAINAGE CROSS DRAINS			
DATE: _____	EFFECTIVE: 07-01-2004	605.10E	2/2